

# Laurie Baker

Shweta Salunkhe

Nagesh Mone



# Laurie Baker



डेकन एज्युकेशन सोसायटीचे  
न्यू इंग्लिश स्कूल, टिळक रोड, पुणे ३०.

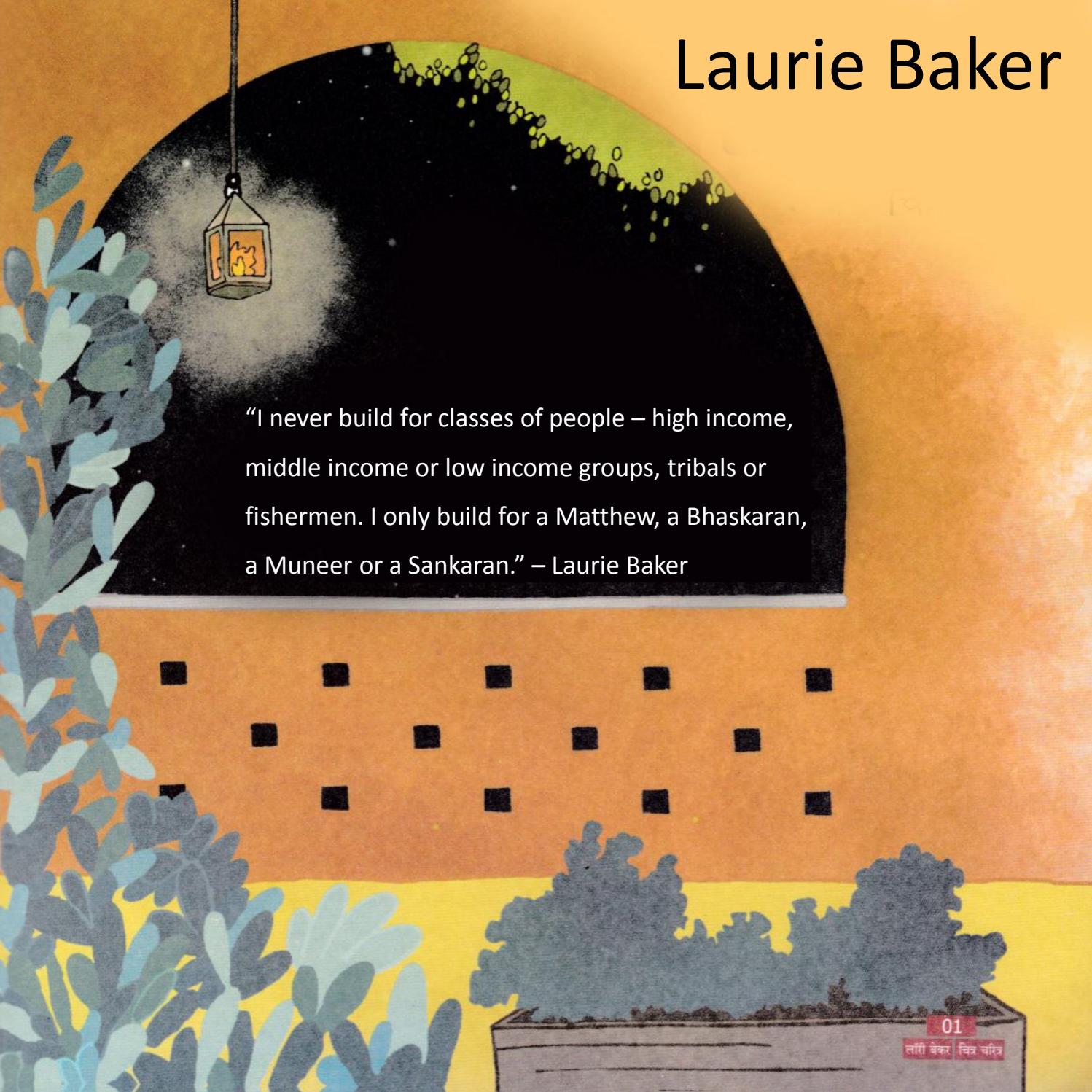


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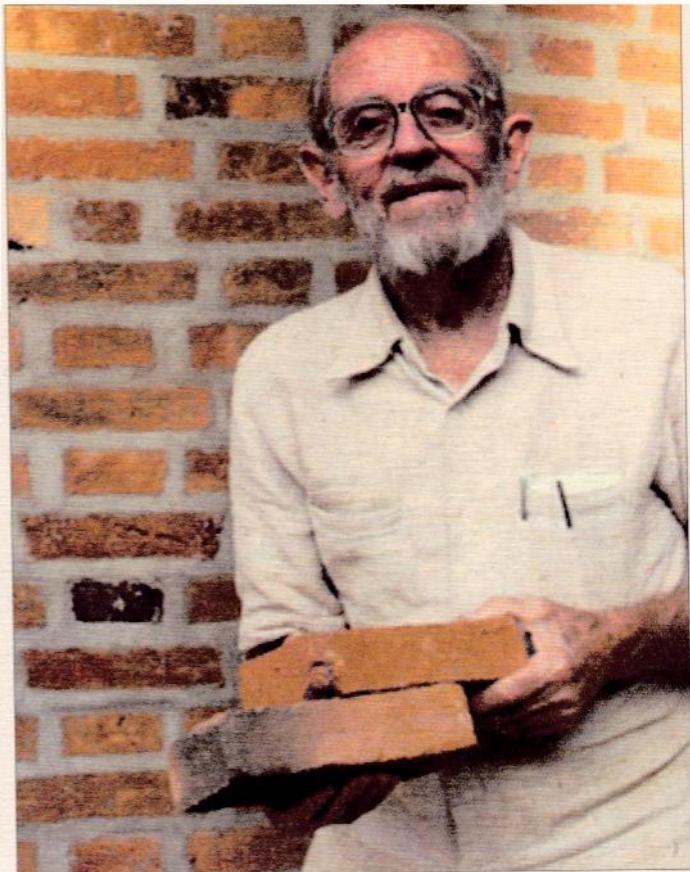
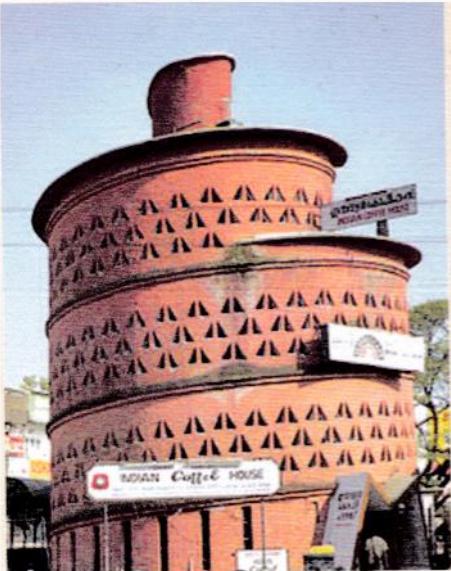
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# Laurie Baker



"I never build for classes of people – high income, middle income or low income groups, tribals or fishermen. I only build for a Matthew, a Bhaskaran, a Muneer or a Sankaran." – Laurie Baker

# Laurie Baker



"Some remarkable work has been done in India in the field of architecture. Indian architecture has its own unique style. Such diversity in architecture is perhaps not found in any other country. I feel we must preserve this rich heritage and not let it die. We must build more using the Indian style of architecture and take this great tradition forward."

Laurie Baker

## Laurie Baker



Laurence Wilfred Baker was born in England on 2 March 1917. Today we know him as "Laurie Baker." Laurie was born in a family where traditions were strictly followed. Baker was interested in buildings right from his childhood. At 17 Laurie decided to explore Europe on his cycle. During his journey he came across beautiful cities and wonderful landscapes. He saw different building styles in different countries. This had a great impact on young Laurie. After returning from his Europe trip, Laurie decided to study and work in the field of architecture.



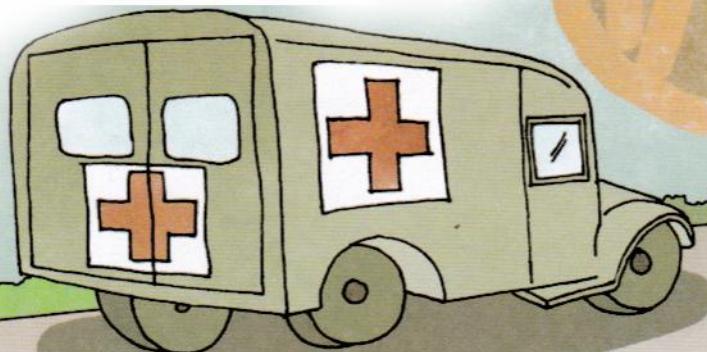
## Education

After completing High School, Laurie went to study at the Birmingham School of Architecture in London. In 1938 he became an associate of the Royal Institute of Architecture. Fortunately, he didn't get much time to practice his vocation in England, as the Second World War broke out in 1939.



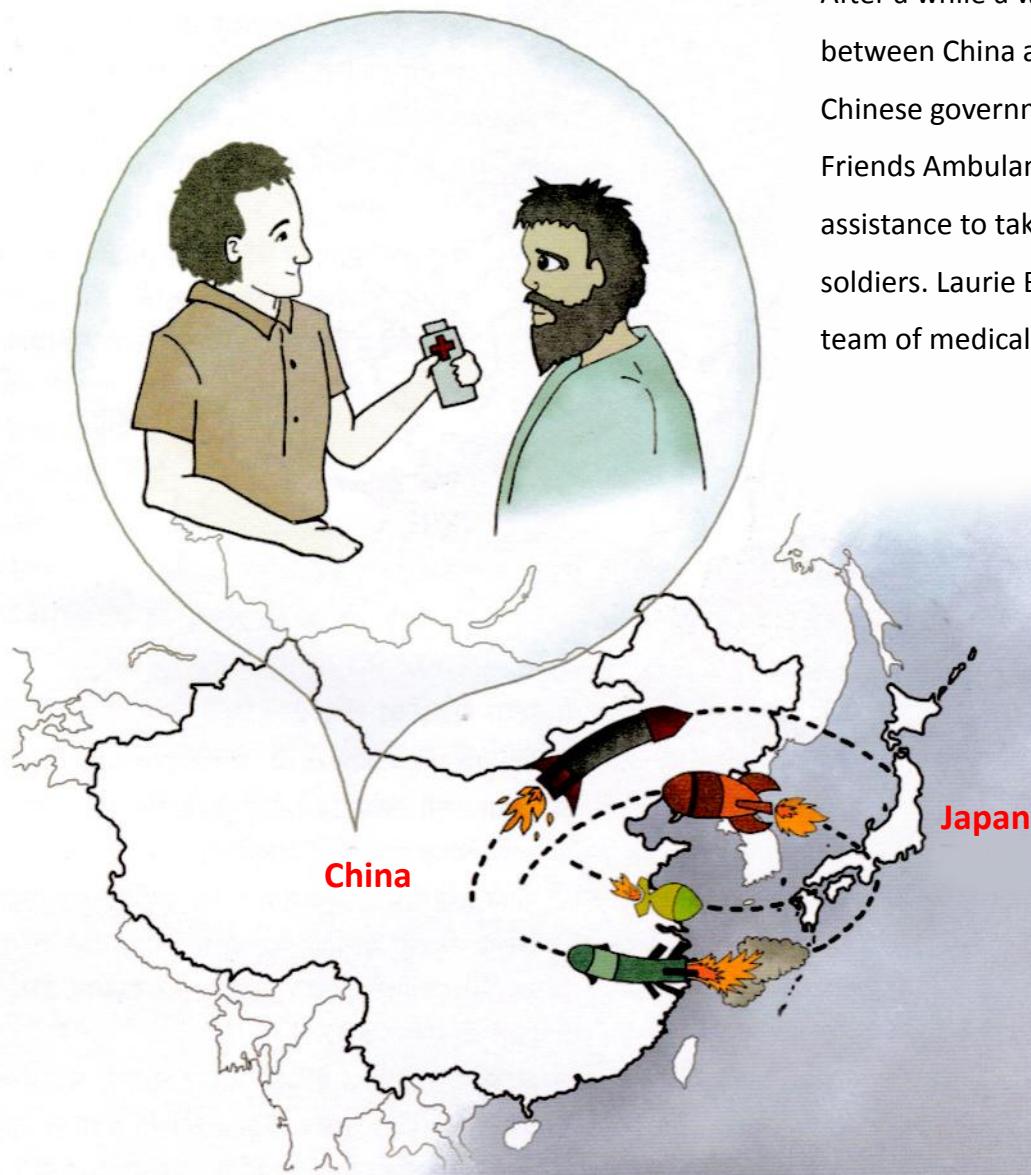
## "Friends" Ambulance

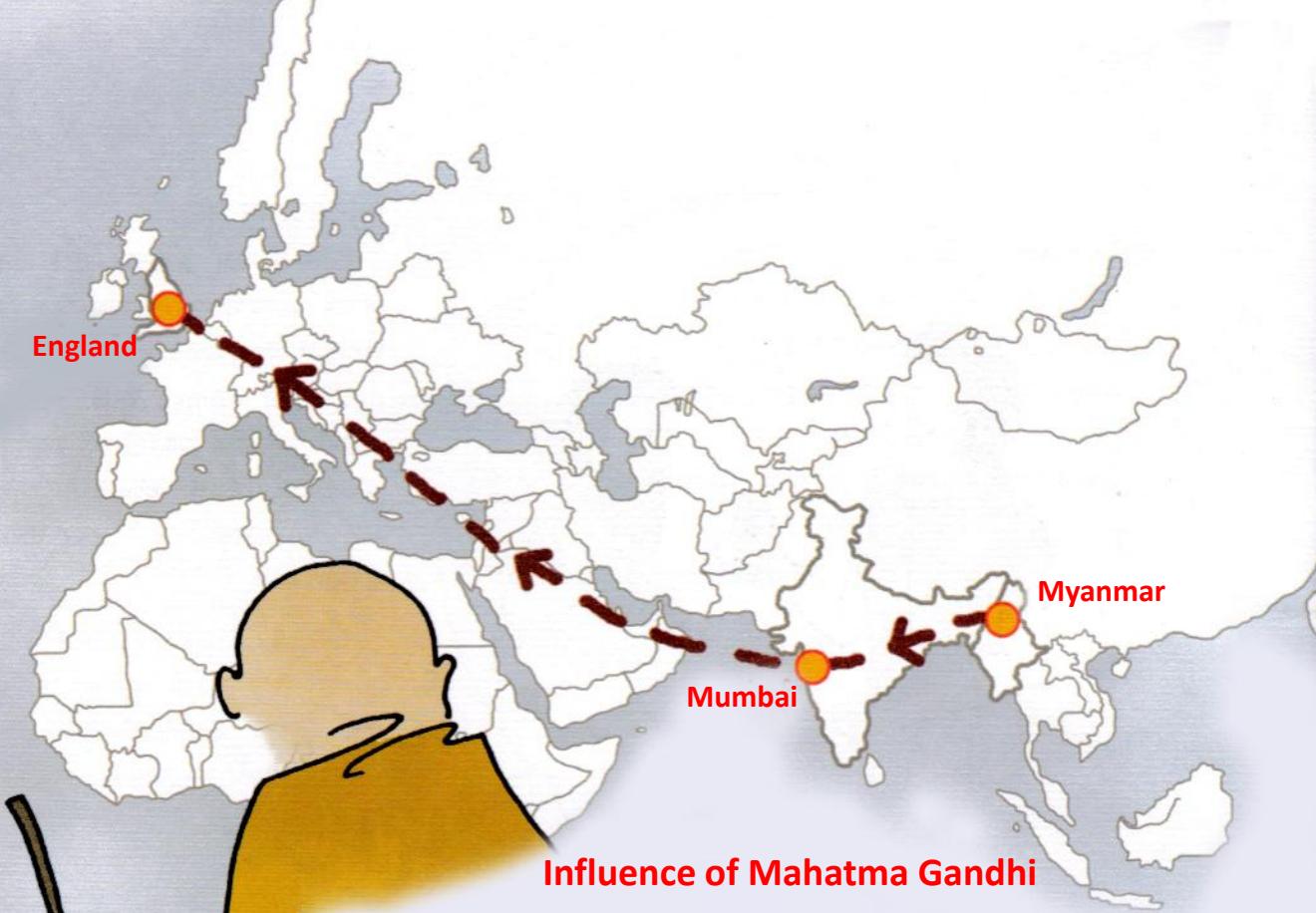
During the Second World War Laurie and some of his friends enrolled with the FAU (Friend's Ambulance Unit). These volunteers were trained in giving anesthesia, performing minor surgeries, dressing and give injections to soldiers injured in battle.



## China-Japan War

After a while a war broke out between China and Japan. Then the Chinese government called upon the Friends Ambulance Unit for assistance to take care of the injured soldiers. Laurie Baker joined this team of medical volunteers.





### Influence of Mahatma Gandhi

For a while Laurie Baker helped injured soldiers in Myanmar. He also took care of leprosy patients. During this time he worked very hard and neglected his own health. So, he fell ill and had to return back to England. On his return he had to wait in Mumbai for three months to catch the next ship to England. It was during this period that he had a chance to meet Mahatma Gandhi. Gandhi's message of love and non-violence had a deep impact on Laurie Baker.

Gandhi requested Baker to return back to India. He told Baker that India needed architects who could design low-cost houses for millions of people living in remote villages. Gandhi also mentioned in passing that the material for construction should be procured locally, from within a radius of 5-miles from the construction site.

## Laurie Baker's Marriage

1945, Laurie Baker returned to India to design hospitals for leprosy patients. In India, he stayed with his friend Dr. Chandy. There he met Dr. Elisabeth Jacob - Dr. Chandy's sister. She was a trained doctor from the Christian Medical College, Vellore.

Baker and Elisabeth worked together and rebuilt a small clinic into a hospital. Elisabeth treated leprosy patients in this hospital. Laurie and Elisabeth's life goals were quite similar.

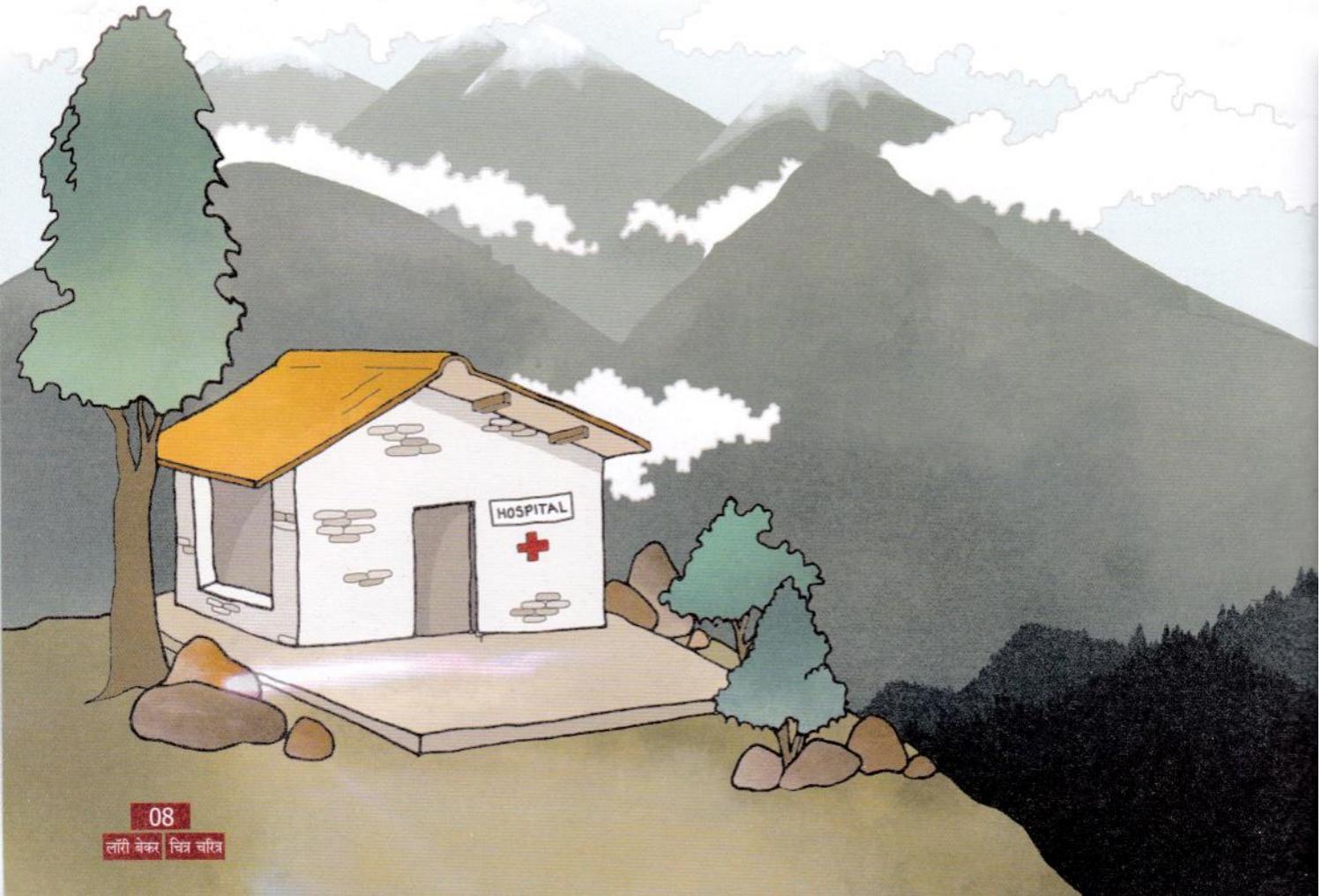
One day while both of them sat and chatted, Laurie proposed marriage to Elisabeth. As Elisabeth had worked with him for a while so she was aware about his idealism and gentle nature. So, Elisabeth immediately said a "Yes" to the marriage. In 1948, Laurie and Elisabeth were married.



## Sixteen Years in the Himalayas

Immediately after marriage Laurie Baker and Elisabeth moved to a small village named “Chandag” in the Himalayas. When people heard that a new qualified doctor had come there, they came from far off, in large numbers for treatment. In the beginning the Baker’s set up their clinic in a small, abandoned tea shop. Later they moved to the village of Chera. There they build their house and a small hospital. Sometimes people asked Baker, “You are an architect, what do you do in the hospital?” Then Baker would laugh and reply, “My wife is the only doctor, and I make up for the rest of the staff!”

Laurie Baker also helped build a leprosy hospital in Faizabad, Uttar Pradesh.

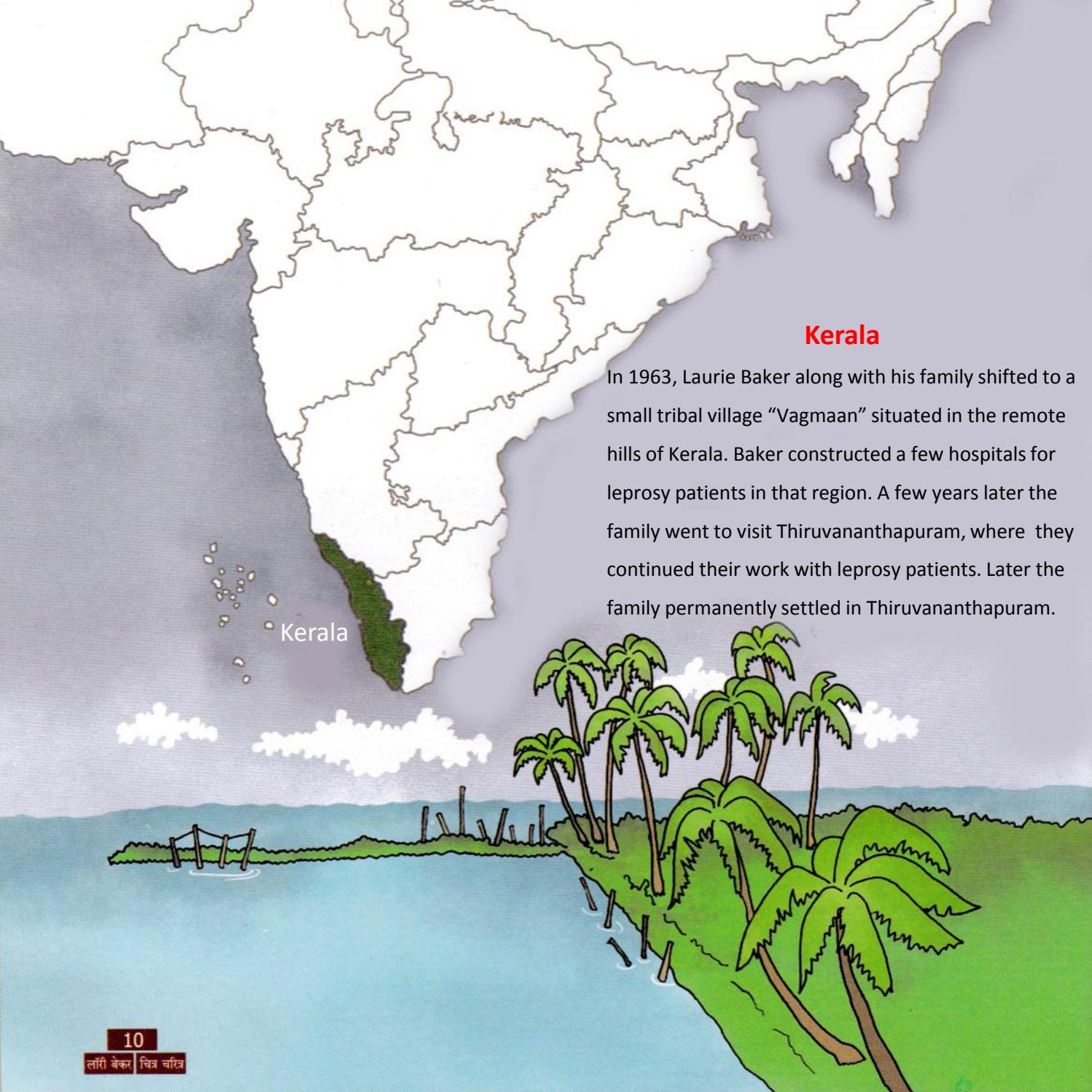


## Local Construction Technology

After travelling all over India, and seeing the geographical diversity of India, Laurie Baker realized that his British architectural training would not be of much use. After this Baker started studying local construction techniques. He collated and categorized them. He learnt the use of low-cost local construction materials from ordinary masons and workers. He also lived like an ordinary Indian.

Laurie Baker designed and constructed many schools, hospitals and social service organizations. He ran some of these institutions with his own money. This was how Baker got into construction.





## Kerala

In 1963, Laurie Baker along with his family shifted to a small tribal village "Vagmaan" situated in the remote hills of Kerala. Baker constructed a few hospitals for leprosy patients in that region. A few years later the family went to visit Thiruvananthapuram, where they continued their work with leprosy patients. Later the family permanently settled in Thiruvananthapuram.

## The Hamlet

After moving to Thiruvananthapuram the Bakers' bought half an acre of land to build their own house.

They constructed "The Hamlet" over a small hill overlooking a beautiful valley. From the architectural point of view their house was a veritable museum.

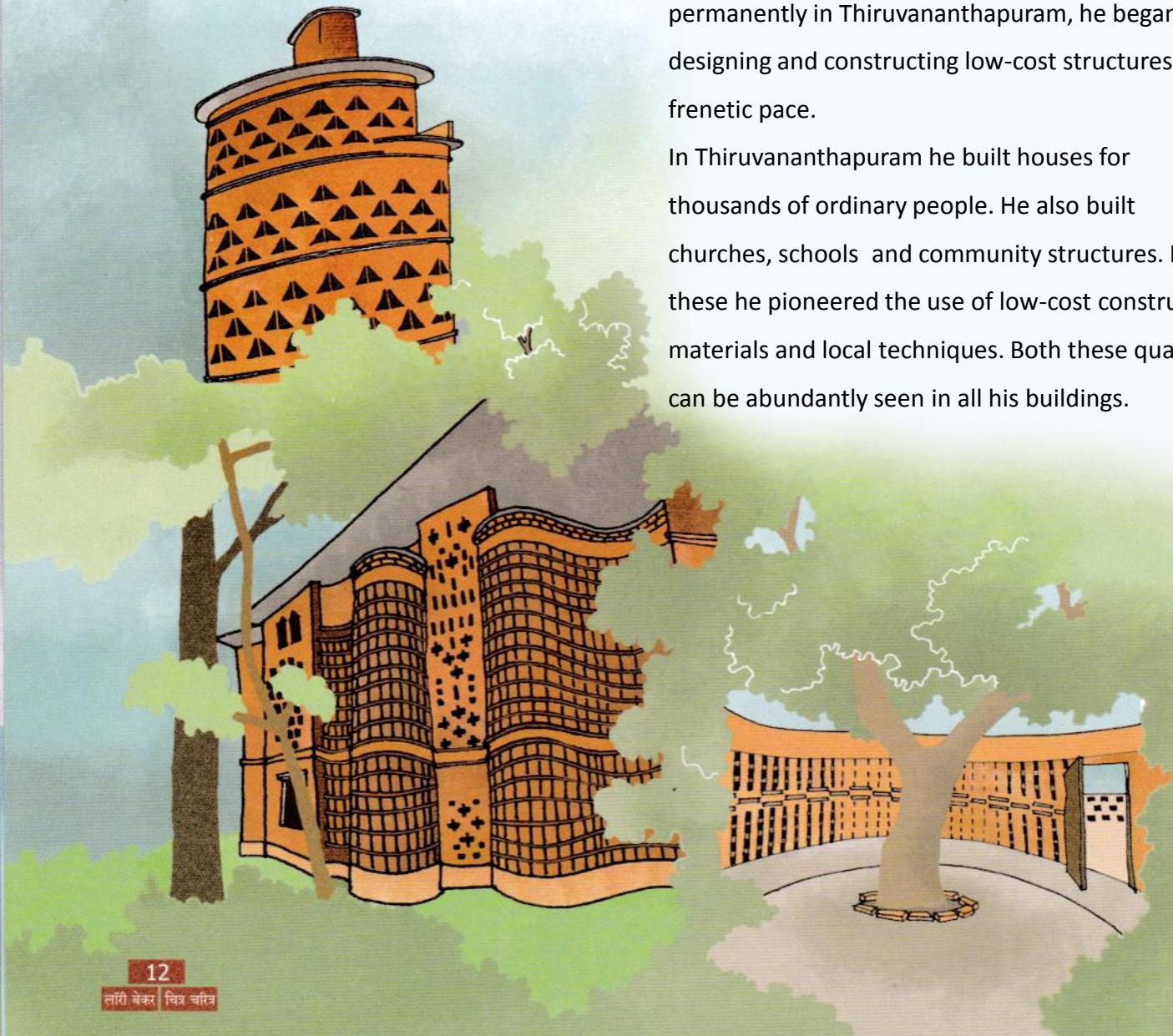
Laurie Baker constructed the sloping tiled roofs, bare brick walls, *jaalis*, doors and windows of his house using salvaged materials from old demolished traditional buildings. Therefore the Hamlet gives a glimpse of the changing architectural trends in Kerala.

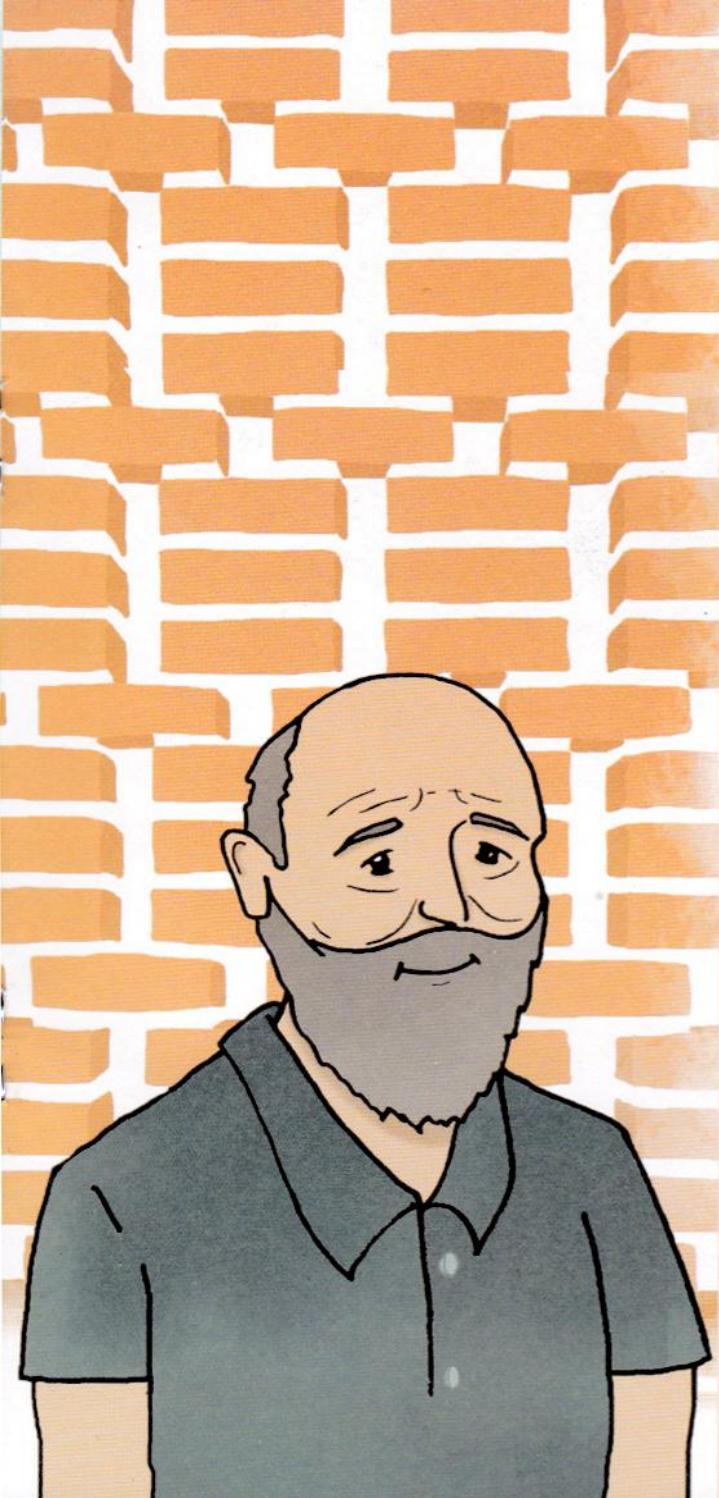


## Baker's Work

Baker constructed many buildings in his active career spanning 40 years. Very little is known about the work he did in the Himalayas. But after settling permanently in Thiruvananthapuram, he began designing and constructing low-cost structures at a frenetic pace.

In Thiruvananthapuram he built houses for thousands of ordinary people. He also built churches, schools and community structures. In all these he pioneered the use of low-cost construction materials and local techniques. Both these qualities can be abundantly seen in all his buildings.





## In Laurie Baker's own words....

"In what I have seen it seems to me that local architecture has answers to most of the people's needs. Visit any district, and you will see that earlier most people built their houses with their own hands. But slowly, people have lost those skills. That 's why they need outside help to build their houses."

"Perhaps Gandhi was the only Indian leader who thought deeply about the housing problem of millions of people. I loved Gandhi's statement in which he said that, 'The material for constructing houses in villages should come from within a radius of five miles.' This radical thought, deeply impacted my work."

"In a poor country like India we have no right to waste money, energy or any other valuable resource."

"I learnt much more from ordinary masons and construction workers than from fellow professional architects."

"To think that low-cost houses are fit only for the poor is faulty thinking. Low-cost does not imply sub-standard quality and less amenities. We should not exalt and praise poverty."

# Laurie Baker

## Time Line

Laurie Baker made sterling contributions to Indian architecture. He was able to strike a good balance between his personal and professional life. This enabled him to do very high quality professional work. His ideals and practice, and his amazing personal qualities have inspired many. Laurie Baker's work and his life is an ideal to be emulated. Today "Global Warming" and "Low-carbon footprint houses" make his work even more relevant.



1917: Born

1938: Associate of the Royal Institute of Architects.

1981: Honored with a D. Lit. by the Royal University of Netherlands.

1987: Inaugural Award of the National Housing Board.

1988: Became an Indian Citizen.

1990: Honored with the Padma Shri Award by the Government of India.

1992: Habitat Award and Habitat Roll of Honor by the United Nations.

1993: Awarded the Sir Robert Matthew Prize for low-cost housing designs.

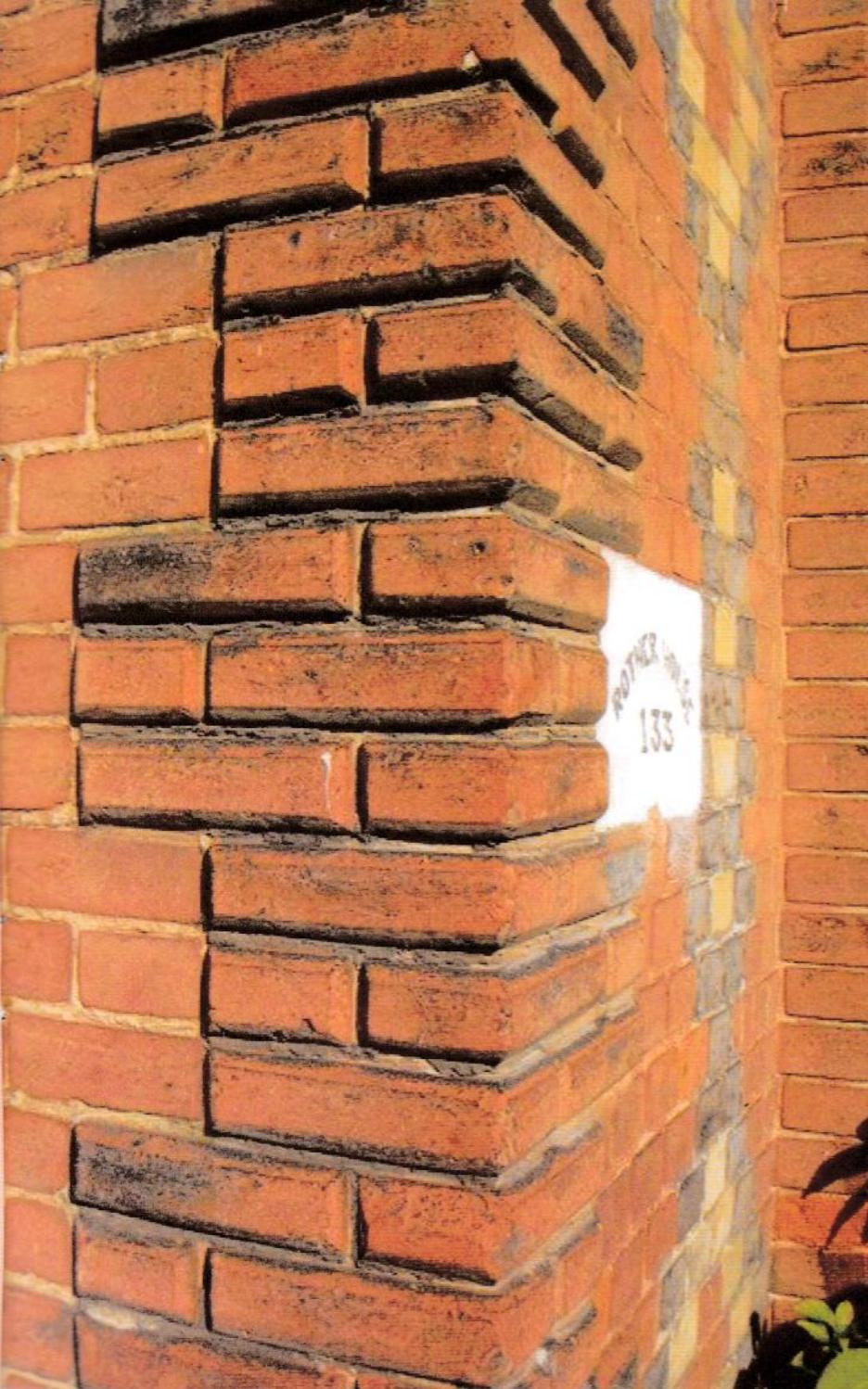
1994: People of the Year Award.

1995: Awarded an Honorary Doctorate by the University of London.

1998: Awarded an Honorary Doctorate by Sri Venkateswara University.

2006: Nominated for the Pritzker Architecture Prize.

2007: Died at the age of 90.

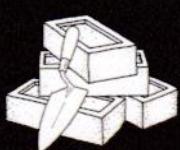


# Laurie Baker

"When I look at bricks they remind me of human faces. All bricks are made by baking the same clay in a kiln. But each brick looks a wee bit different from the others. Each brick has a slightly different shape. The texture and color of each brick is unique and different from the others.

This is the reason I hate plastering brick walls. Plastering is artificial and a total wasteful. By plastering a brick wall we kill the individuality of each single brick! Apart from raising costs plastering also makes the house look ugly."

- Laurie



## Laurie Baker

Laurie Baker was one of India's most important architects. He pioneered the use of low-cost techniques and locally available materials in construction. Be it a government or private building, an office or someone's private house, Baker always tried to cut down costs to make the building more affordable. The technique of using minimizing energy and still making environmentally friendly affordable houses can be termed as Laurie Baker's technique.

Laurie Baker was born in England in 1917. He died in India in 2007. He lived a full ninety years. He started full time architectural work only at the age of 50. He studied architecture at the University of Birmingham. During the Second World War he volunteered as an Ambulance worker in China. While returning from China to England he had to wait for a ship in Mumbai for a few months. That's when Baker met Mahatma Gandhi. Gandhi was immediately attracted to Baker's handmade sandals. Gandhi appreciated his craftsmanship. He told Baker, "We need clever and visionary people like you in India. While constructing houses we must try and use local materials, designs and skills. And as far as possible all the constructions material must come from within a radius of 5-miles from the construction site."

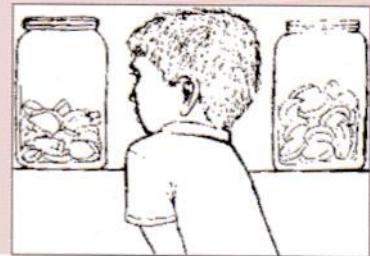
Laurie Baker returned to India a few years later. In India he constructed hospitals for leprosy patients, low-cost houses and public buildings. In 1948, he married Dr. Elisabeth Jacob. After marriage the couple moved to Pithoragarh. There they ran a hospital where Elisabeth was the only doctor and Laurie combined all assistants in one! The first institutional building designed by Laurie Baker was the "*Literacy House*" started by the American educationist Welthy Fisher in Lucknow. Laurie also designed "*Noor Manzil*" - a psychiatric hospital in Lucknow.



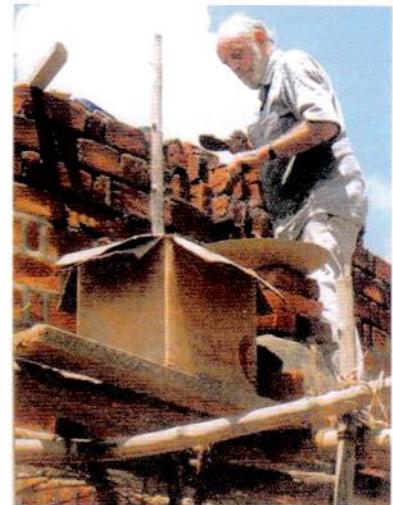
Birmingham School of Architecture

Laurie Baker was a Quaker. The Quaker's always fought religious dogmatism and questioned religious extremism. They believed in austerity and peace. In some sense the Quaker beliefs came very close to the Gandhian way of thinking. In 1947, The Quakers received the Noble Prize for Peace.

Baker learnt frugality and good value for money early in life. As a child he would spend his pocket money buying biscuits from a local bakery. He soon discovered that for the same money he could buy double the amount of broken biscuits. And the broken biscuits tasted just as good! This lesson he never forgot.



In the 1960's Baker returned to his wife's home state of Kerala and settled in Thiruvananthapuram. He started practicing as a full time architect only at the age of fifty. Baker organized his work as a designer-builder in the manner of a traditional Indian master craftsman. He never hired an office or an assistant, and often sketched his building plans on waste paper, designing largely on site. His projects were executed not by engineers but by teams of craftsmen he had trained himself. His hands-on approach with no middlemen enabled him to cut costs to the bone. He was deeply sensitive to the environment and seldom used energy guzzling steel or cement. He never failed to point out. "Cement is younger than I am, whereas people have lived in traditional houses made with local materials for centuries."



Baker visited his construction sites very frequently. One day he got very angry with a mason and fired him left, right and center. On returning home Baker realized his folly. Then he immediately wrote a letter of apology to the mason.

"On Sundays our parents did not allow us to play. My elder brother was ten years older to me. He did not like this dictatorial rule. He was also very naughty! My brother would quietly slip out of the house for swimming and playing tennis! I loved his guts. He was my hero! We must emulate good things, and oppose foolish things. I learnt this lesson from my elder brother. "

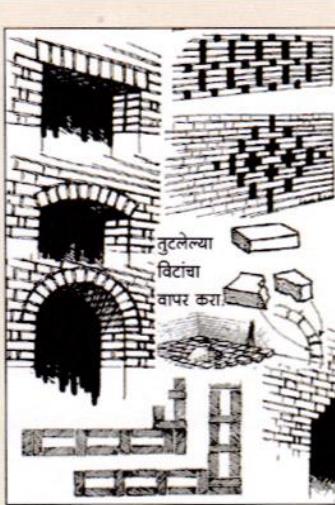
– Laurie

Baker drew simple drawings and building plans so that ordinary workers could understand them. He often drew on the back of envelopes or marriage cards. Despite living in Kerala for many years he was not fluent in Malayalam. He could only speak a few words in Malayalam like - water, tomorrow, construction material, one and two. But he knew Hindi quite well. His application for Indian citizenship lay with the government for many years. In 1988 he was granted Indian citizenship. Before that, every three months he had to go and report to the local police station and jot his details in a register. It was in the Himalayas that Baker saw how traditional Indian architecture reflected thousands of years of trial-and-error research in energy efficiency. People used local stone and timber found within a few hundred yards of their houses. Seeing this reminded Baker of one of Gandhi's beliefs – that all buildings should be made of materials found within 5-miles of the construction site.

Baker was not always able to follow that principle, but came close to it. He was profoundly hostile to glass and steel – both energy guzzlers. But he loved embedding colored bottles in walls for kaleidoscopic light-effects. He loved bricks and often laid them in rat-trap bonds to save 25% bricks and gain great insulation for the wall. His brick *jaalis* (wall cavities) brought in cool air from outside while roof vents pushed out the hot air. For mortar he used lime. He replaced steel and reinforced his slabs with split bamboos at one-fifth of the cost.

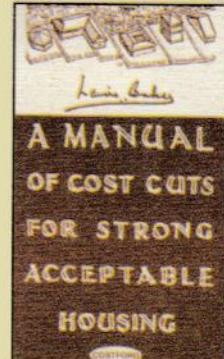
In the rural areas there were no big construction machines. People constructed their houses using local stones, clay and wood using their bare hands. Baker was very surprised at the eco-friendly and aesthetics construction of village houses.

"I gather all details of the person whose house I construct. How do they cook their food? What do they eat? Do they eat alone or as a family? How does their bedroom look? What facilities do they have for working, stitching and reading? I often spend a lot of time pondering over such minor details." – Laurie



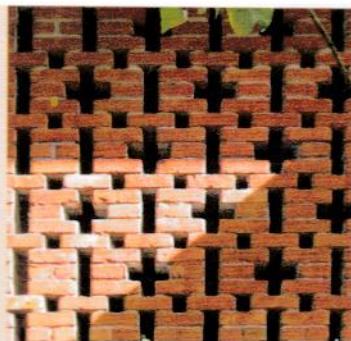
Laurie was not the brightest in his school. But he had a deep interest in drawing and sketching. After finishing school, at a friend's suggestion he applied for admission to the College of Architecture. The principal was very impressed by Baker's art work and admitted him. In college Laurie learnt beautiful art. He also learnt sculpting, clay work, ceramics and music. This laid a solid base for Baker's future work.

Laurie Baker was once invited to New Delhi for a seminar on housing. The subject was "Housing for the Poor". The seminar was to be held in a 5-star hotel. Baker gently expressed his inability to attend. The cost of airlifting him and lodging him in an expensive hotel would have been enough to construct a house for a poor family! He wrote this to the organizers. Instead of traveling Baker hand-wrote an illustrated handbook on how to reduce building costs. This book was later published by "COSTFORD".



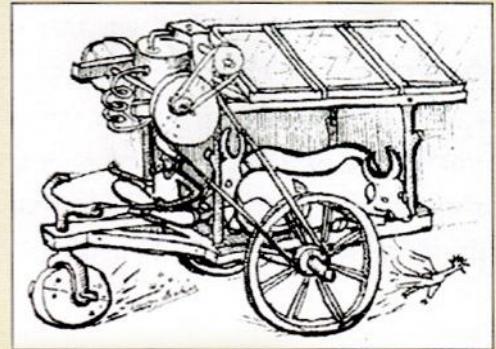
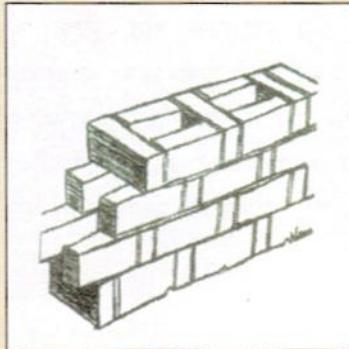
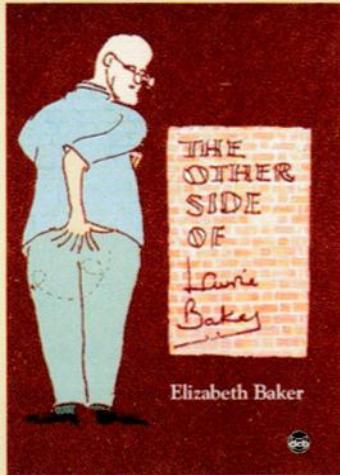
Baker studies traditional buildings critically and took copious notes. Many of these traditional structures were environment-friendly and had stood the test of time. They gave Baker a new vision for his future designs. Baker used traditional materials, skills and designs – tried and tested for thousands of years to construct comfortable homes. He was convinced that 'architecture was too important to be left to architects'. He wrote a dozen do-it-yourself booklets with titles like *How to reduce building costs? Rubbish and Mud* illustrated with his own pen-and-ink diagrams. Two of his most celebrated buildings were the *Centre for Developing Studies* (CDS) and a modest *Coffee House* near the Thiruvananthapuram bus stand. He never wanted his buildings to rise above Kerala's coconut tree cover! Even in very difficult situations the humorous Baker found sensitive and easy solutions to problems.

The buildings which Baker constructed in Gujarat, UP and West Bengal were very different from his Kerala designs. The "Baker Style" of Gujarat was totally different from the "Baker Style" of Kerala.



"I have seen poor people in villages construct their own houses. I witnessed the use of new materials in their beautiful houses. Their craftsmanship of making aesthetically beautiful walls out of simple materials like stone, mud, bamboo and straw astounded me!"

– Laurie



Bullock-cart running on Solar Energy  
(Cartoon by Laurie Baker)

Many experts were very critical of Baker's approach. Laurie Baker never wasted time in countering his critics. Instead he concentrated his energies on building low-cost, aesthetically beautiful houses for ordinary folks. In several articles he decried the falling societal standards. He also showed alternative ways of expressing dissent.

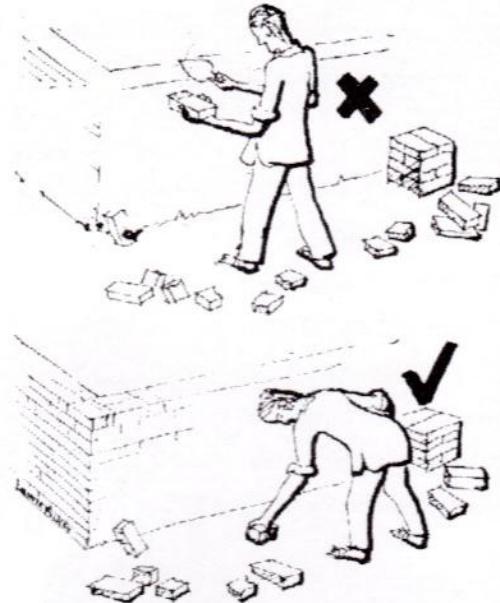
Laurie was not just an architect. He embraced life to the fullest and on various occasions became an anesthetist, missionary, gardener, cook, farmer, veterinarian, ambulance driver, carpenter, mason, poet, cartoonist etc. In his cartoons Baker depicted how to live a simple but yet fulfilling life. Baker himself worked hard and lived a passionate life. Though Baker was granted Indian citizenship only in 1988, but he had become an Indian the moment he met Mahatma Gandhi!

Baker was conferred with several honorary doctorates. The British government bestowed the Order of the British Empire and MBE. He received the inaugural United Nations Habitat Award. In 1990 he was awarded the Padma Shri. But he was happiest to be made an Indian citizen in 1988. Elisabeth and Baker adopted three children – son Tilak and daughters Vidya and Heidi. Baker loved India.

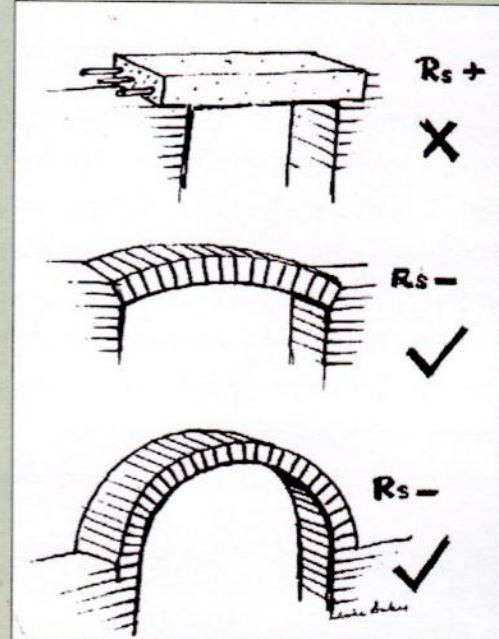
Laurie Baker died at the ripe age of 90, on April fool's day 2007 in his home. Even in death he pulled a fast one on his detractors.

You need half a brick?

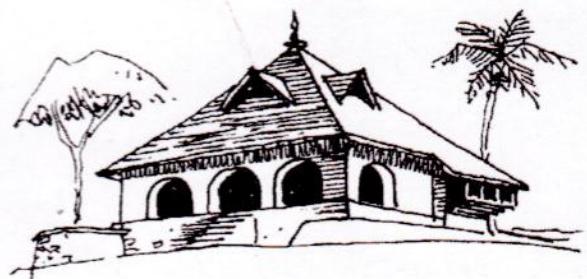
Then why  
are you  
breaking a  
full brick.  
By doing this  
you are  
wasting  
money, time  
and energy.



Just look down below. From there pick up a half  
brick and continue working.



This house is made of bricks and mud. This  
house is multi-storied and the shade of the  
coconut trees keeps it cool.



This house is made of bricks and mud.  
Isn't it beautiful?

In India 20-million people do not have their own house. People working in the field of housing must give a serious thought to this. They must work towards making low-cost and beautiful houses because this is need of ordinary people. It is possible to fulfill this demand, but for this we will need an alternate perspective. We also need to recycle waste water. Even basic amenities are not available to large section of our people. If we are serious about helping the poor then we need to change our way of thinking. And then the solutions we adopt will be very different!

After making a brick wall we plaster it with cement. To show that the wall was made of bricks we etch a brick design in the plaster and then paint rectangular bricks! What could be nothing more foolish than that! If we like a painting we hang it on a wall or place the sculptor in a special place. Anyone wishing to admire them has to go near them. But this is not the case with houses and buildings. We look at them every time we go out. The task of an architect is to design aesthetically pleasing buildings, so that ordinary people feel happy just looking at them.



In many Indian houses I saw *jaalis* (wall cavities). This had an impact on my own designs and I incorporated them in my work. The *jaalis* made the buildings beautiful and also reduced costs. The brick *jaalis* brought in cool air from the outside while roof vents pushed out the hot air. During the hot summers, sometimes hot blasts of air can be unpleasant. Instead of making lentils on top of doors and window frames it is cheaper and more aesthetic to make semi-circular arches out of bricks. Arches are very strong! I also dislike the use of frames in doors and windows. I have successfully constructed many houses without any frames.

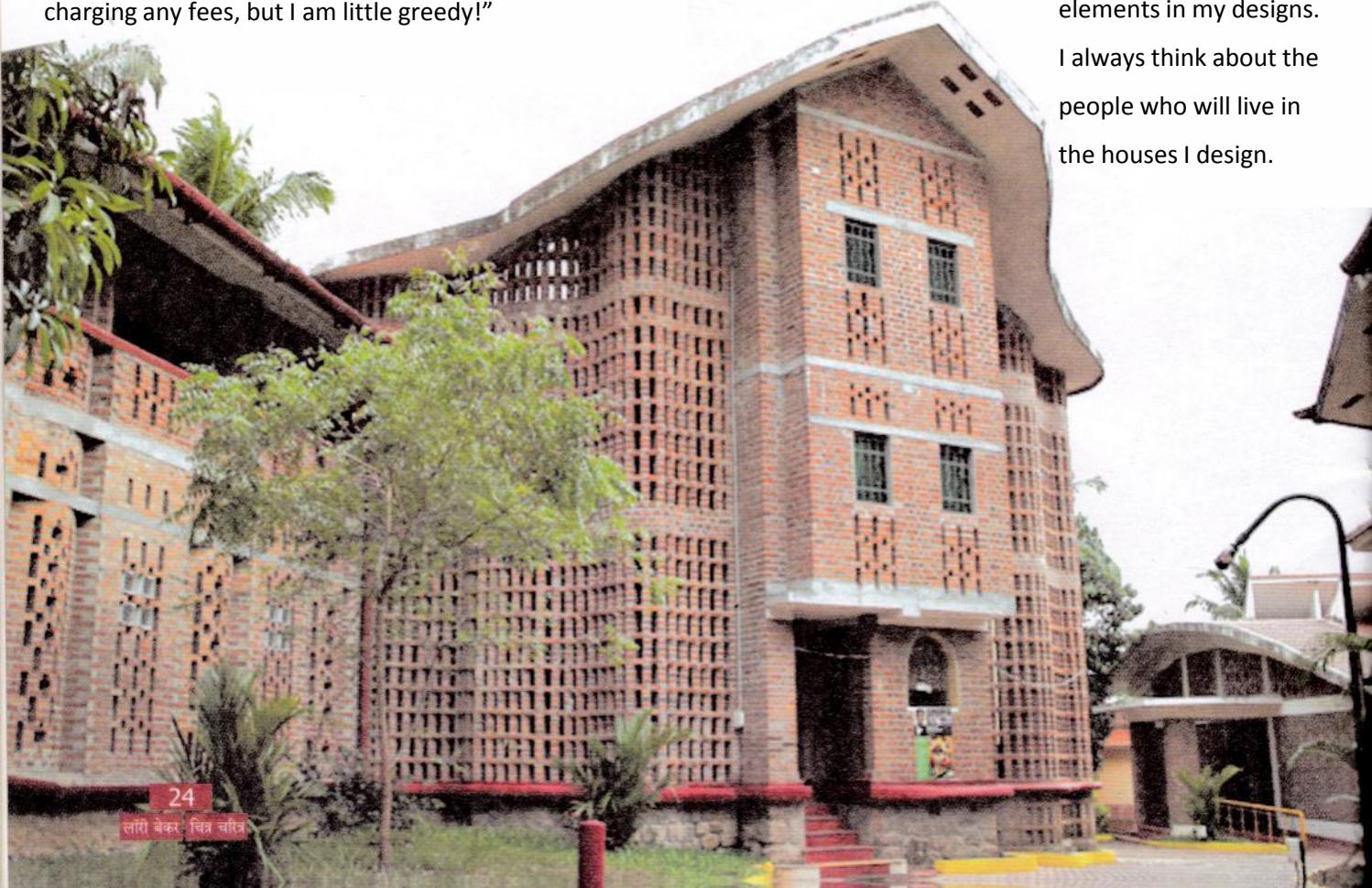
Millions of Indians do not have access to basic amenities. Many houses lack a floor, roofs, doors and windows. Often two families are forced to share a single dwelling. Can the children study there in peace? We make tall skyscrapers, malls and air-conditioned cinema theatres, massive bridges across rivers, but we completely ignore basic amenities to the poor. We have to change our way we treat our slum dwellers. People's homes and the environment are interlinked to their productive capacity.

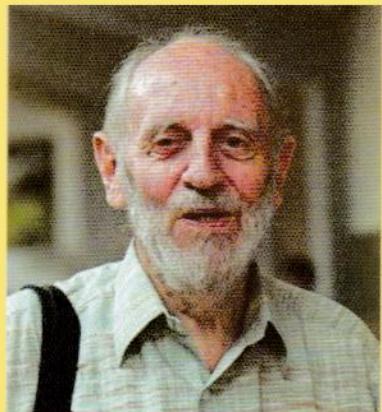


After I read about some Hindu and Muslim friends I felt them to be true Christians. They appear to be better Christian's than myself! In my 80 years I have found violence to be the most abhorrent trait. Violence in the name of religion, country, caste etc. does not solve any of the fundamental problems faced by ordinary people. On the other hand love and brotherhood can definitely solve these problems. Love towards others is the only true religion!

Laurie Baker charged his clients a meager fee. Often his fees equaled the wages of a mason! "Because often I work on two-three sites simultaneously, so I earn enough to make ends meet! My country of birth looted India. It is difficult for me to repay it back. In fact, I should not be charging any fees, but I am little greedy!"

Where is the highest point of the construction site, where is the lowest? I pay attention to such details. Where are the small bushes and the trees? Where will the domestic animals be housed? What is the direction of the wind, rain? I incorporate these elements in my designs. I always think about the people who will live in the houses I design.

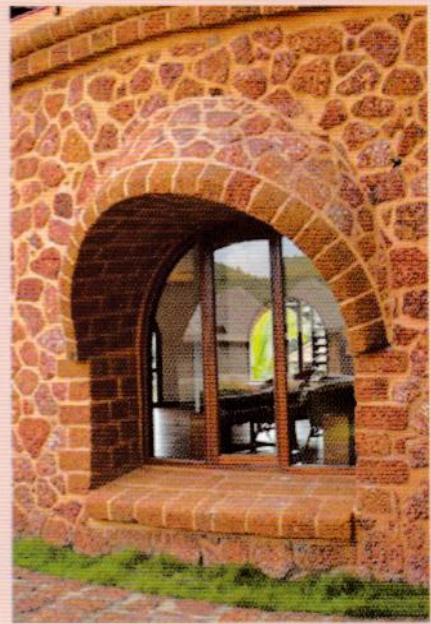




In 1990  
the Government  
of India conferred  
**Padma Shri**  
on Laurie Baker.



- 6 Every building should be UNIQUE. No two people, or families etc are alike, so why should their houses all be the same?
- 10 DONT ROB NATIONAL RESOURCES & do not use them extravagantly or unnecessarily.
- 11 Be HONEST & TRUTHFUL in design & material usages, construction, costs, & about your own mistakes!
- 12 AVOID OPULANCE & 'SHOWING-OFF', and dont use currently fashionable gimmicks.
- 13 Get your CONSCIENCE out of deep-freeze & USE it. Let ALL YOU DO be honest & truthful-not only yr buildings.
- 14 Look closely at YOUR OWN PREJUDICES. Question them and see if they are still justifiable!
- 15 HAVE FAITH IN YOUR OWN CONVICTIONS & have courage to stick to them — but respect those of other people.
- 16 Make COST-EFFICIENCY your WAY OF LIFE—not merely "Low Cost for the Poor". Practice what you preach.
- 20 TRIM your drawings, staff, equipment, travel & transport, paper, & expenses.  
(MY FEELINGS ABOUT BEING AN ARCHITECT !) Laurie Baker



डेक्कन एज्युकेशन सोसायटीचे  
न्यू इंग्लिश स्कूल,  
टिळक रोड, पुणे ३०.



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